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1 33. The integrated circuit structure of claim 23 wherein the impurity species is
2 boron.

REMARKS

5 Examiner Pompey is thanked for the thorough examination of the subject Patent Application. The Claims have been carefully reviewed and amended, and are considered to be in condition for allowance.

Reconsideration of the rejection under 35 USC §103(a) of Claims 13-22 as being unpatentable over U.S. Patent 5,436,488 (Poon et al.) is requested in
10 light of the following argument. Claims 13-22 are cancelled and therefore the rejection is moot.

Claims 23-33 are added to claim an integrated circuit structure having a plurality of shallow trenches with a nitrogen doped liner and a gap filling insulating material filling the shallow trenches. The integrated circuit further has
15 transistors formed in regions between the shallow trenches. The sources and drains of the transistors are formed by diffusing an impurity species such as boron into the surface of the substrate. The nitrogen doped liner prevents any of the impurity species from spreading from the gap filling insulating material to the are of the transistors. This prevents an imbalance of the concentration of the
20 impurity species during formation of the transistors.

The sidewall of Poon et al. is formed in the preferred embodiment by thermally oxidizing the trench sidewalls. While the alternative to the thermally oxidized sidewalls is use of another dielectric such as silicon oxynitride, there is no description of the forming of transistors in the integrated circuit and using a
5 nitrogen doped liner to prevent the spread of the impurity species from the gap filling insulating material.

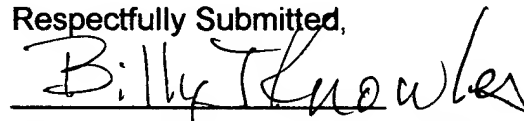
The related art references made of record and not relied upon have been reviewed and it is agreed that they do not suggest the present detailed claimed invention.

10 Allowance of all Claims is requested.

It is requested that should the Examiner Pompey not find that the Claims are now allowable, that the undersigned be called at (845) 452-5863 to overcome any problems preventing allowance.

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Respectfully Submitted,



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